AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (currently amended) An implant for use in a patient's spinal column in connection with a laminoplasty procedure of a cut bone having first and second segments, said implant comprising:

a body portion having a length, a width, ~~and~~ a depth, and a longitudinal axis, the body portion being ~~and~~ configured to be insertable between the first and second bone segments of the cut bone, the body portion having an outer surface and an inner surface forming a hollow region, the hollow region having a longitudinal axis coaxial with the longitudinal axis of the body portion, the hollow region comprising most of the volume of the body portion, the body portion further having first and second open ends for contacting the first and second bone segments, the body portion having an inner side region and an outer side region;

wherein at least one of the first and second open ends comprises a single bone receiving channel extending there across that has a first depth measured from a crotch ~~the trough~~ of the channel to ~~a first side of~~ the outer surface at the inner side region at the at least one end, the first side extending along the length of the body portion, the channel also having a second depth measured from the crotch ~~trough~~ of the channel to ~~a second side of~~ the outer surface at the outer side region at the at least one end, the second side extending along the length of the body portion, the second side opposite the first side, the first depth being less than the ~~and~~ second depth~~s having different measurements~~ and a centerline of the

crotch being offset from the longitudinal axis, the channel configured to engage at least one of the first and second bone segments.

2. (previously presented) The implant of claim 1, wherein the perimeter of the outer surface of the implant is a substantially geometric shape.

3. (previously presented) The implant of claim 2, wherein the geometric shape is an ellipse.

4. (previously presented) The implant of claim 1, wherein the length ranges from about 11.5 to about 15.5 millimeters, the width ranges from about 8.0 to about 9.0 millimeters and the depth ranges from about 5.5 to about 6.5 millimeters.

5. (previously presented) The implant of claim 2, wherein the geometric shape is a circle.

6. (previously presented) The implant of claim 1, wherein the implant comprises a substantially tubular shape.

7. (previously presented) The implant of claim 1, wherein the implant is formed of bone allograft material.

8. (previously presented) The implant of claim 7, wherein at least a portion of one of the first and second ends comprises demineralized cortical bone.

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (previously presented) The implant of claim 7, wherein the bone allograft material is obtained from a cross-section of a donor bone having an intermedullary canal, and wherein said inner surface of the implant is defined by the intermedullary canal of the donor bone.

14. (previously presented) The implant of claim 13, wherein the inner surface is configured such that the volume of the hollow region is greater than the intermedullary canal of the donor bone.

15. (canceled)

16. (previously presented) The implant of claim 1, wherein the bone receiving channel has a substantially concave arcuate shape.

17. (previously presented) The implant of claim 1, wherein both first and second ends comprise a bone receiving channel and both bone receiving channels have a substantially concave arcuate shape.

18. (previously presented) The implant of claim 1, wherein the bone receiving channel comprises at least two angled faces.

19. (previously presented) The implant of claim 1, further comprising at least one surface defining a hole in communication with said outer surface and said inner surface, suitable for attaching a suture to secure said implant to at least one of said first and second bone segments.

20. (previously presented) The implant of claim 1, wherein the implant is fabricated of biocompatible metal.

21. (previously presented) The implant of claim 1, wherein the implant is fabricated of biocompatible polymer.

22. - 68. (canceled)

69. (currently amended) An implant for implantation between first and second bone segments of a single vertebra of ~~use in~~ a patient's spinal column, the implant comprising:

a tubular body having a length, a width, ~~and~~ a depth and a longitudinal axis, and an outer surface and an inner surface forming a thin tubular wall, the inner surface forming a hollow region, the hollow region having a longitudinal axis coaxial with the longitudinal axis of the tubular body, the hollow region having first and second open ends for contacting first and second bone segments of the single vertebra, the perimeter of the outer surface having a substantially oval, circular, or elliptical shape~~, the body further having first and second open ends~~; wherein:

~~at least one of~~ the first and second ends each include ~~comprises~~ a single channel extending there across that has a first depth measured from a crotch ~~the trough~~ of the channel to a first side of the outer surface ~~at the at least one end~~, the first side extending along the length of the tubular body, the channel also having a second depth measured from the crotch ~~trough~~ of the channel to a second side of the outer surface ~~at the at least one end~~, the second side extending along the length of the tubular body, the second

side opposite the first side, the first and second depths having different measurements~~, the channel configured to engage a bone segment~~.

70. (previously presented) The implant of claim 69, wherein the length ranges from about 11.5 to about 15.5 millimeters, the width ranges from about 8.0 to about 9.0 millimeters, and the depth ranges from about 5.5 to about 6.5 millimeters.

71. (previously presented) The implant of claim 69, wherein the tubular wall has a thickness of about 1.0 millimeters.

72.-74. (canceled)